

ABSTRACT OF THE DISCLOSURE

A method of modifying the electrophysiological function of an excitable tissue region of an individual is provided. The method includes the step of implanting cells into the excitable tissue region. Each implanted cell is (a) capable of forming gap junctions with at least one cell of the excitable tissue region; and (b) capable of forming a functional ion channel or transporter, wherein the functional ion channel or transporter is capable of modifying the electrophysiological function of the excitable tissue region.